

# No Compromise Data Protection and Backup Storage Solutions with Guaranteed, Integrated Cyber Security

## A Winning Solution Set: Strong Cyber Resilience with Guarantees

With all the headlines on cyberattacks, preparing for the inevitability of cybercrime is critical. Companies incur huge costs and reputational damage when a cyber attack compromises their data. Infinidat's powerful, easy-to-manage data protection and backup storage solutions with guaranteed cyber resilience enable enterprises and service providers to combat these threats.<sup>1</sup>

Our primary storage platform, InfiniBox®, can be used as a backup target and is best known for its unparalleled performance, which exceeds that of many competitive all-flash solutions. Our purpose-built backup appliance (PBBA), InfiniGuard®, provides powerful deduplication optimized for backup. InfiniGuard also gains performance benefits from an integrated InfiniBox.

Our software-defined storage architecture, InfuzeOS™, underpins both solutions. The cyber resilience technology built into InfuzeOS is known as InfiniSafe®. Our core InfiniSafe cyber stack capabilities are free of charge with InfiniBox and InfiniGuard and backed by our InfiniSafe immutability and recovery time objective (RTO) guarantees.

When confronting a cyber attack, time can cost tremendous amounts of money. Our guaranteed recovery time of 1 minute or less for our InfiniBox solutions and 20 minutes or less for our InfiniGuard significantly reduces a cyber event's potential cost and recovery impact. Why 20 minutes for InfiniGuard? Backup repositories can encompass petabytes of storage, and we recover the immutable copy immediately; it just takes a few minutes to re-attach the deduplication engines to allow full access to all of the recovered repository. It doesn't matter how much data it is, hundreds of terabytes to dozens of petabytes can be recovered quickly.

## Flexibility Doesn't Mean Complexity with Infinidat

Flexible options are key when protecting your most valuable data assets. Companies often have to invest in multiple solutions from multiple vendors to fully protect their data. This adds complexity and a greater management burden on IT staff. This is not the case with Infinidat solutions, which are designed for easy installation and management and are also easy on your OpEx budget.

Infinidat's InfiniBox or InfiniGuard solutions provide flexibility and choices to support many situations. If you use a major backup software application (Veeam, Commvault, NetBackup, Networker, SpectrumProtect, etc.) and want to store your data on a purpose-built appliance, InfiniGuard is recommended. In situations where your backup application is doing the data reduction and/or your backups are encrypted, then InfiniBox is

**Infinidat is best known for InfiniBox and its tremendous ability as a primary storage platform. We also leverage this part of our portfolio in our InfiniGuard purpose-built backup appliance. Because InfiniBox delivers unparalleled performance that exceeds many competitive all-flash solutions, it is perfect for use as part of our InfiniGuard platform. All our solutions use our software-defined storage architecture, InfuzeOS. Infinidat's all-flash offering, InfiniBox™ SSA, sets a new standard in the enterprise storage industry by delivering the "ultimate performance" enterprises need for critical workloads. Performance, 100% availability, and cyber resilience are guaranteed.**

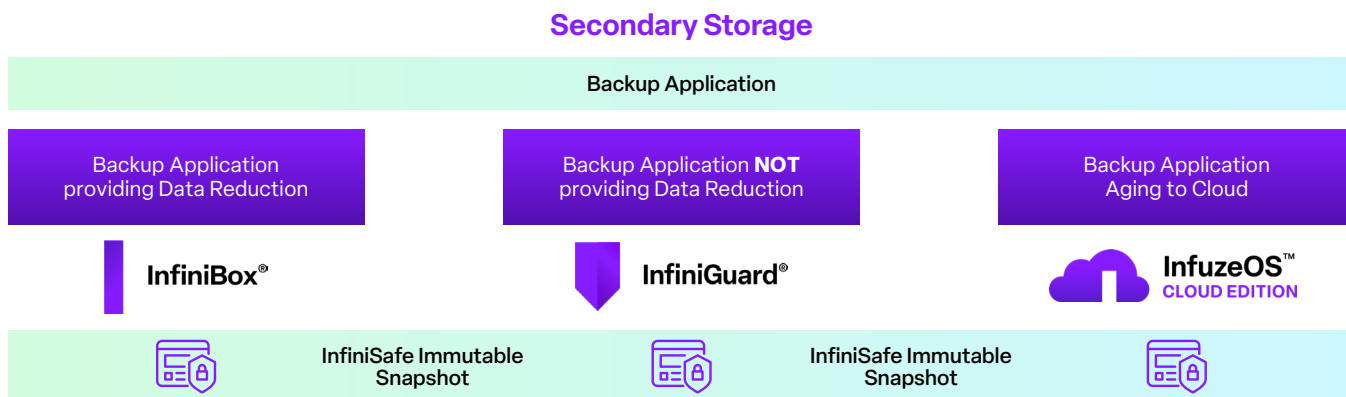
recommended. You may also opt for other methods to protect your data, such as native backup utilities like Oracle RMAN and SQL/Server BACKUP. Here is a real-world example:

**A Fortune Global 500 company dramatically improved restore times for their Oracle databases without any impact on service, thanks to Infinidat solutions. They use both InfiniBox and InfiniGuard. In areas where they need to optimize deduplication, they leverage InfiniGuard; in cases where the data is encrypted, they leverage InfiniBox. The results are pretty powerful:**

- The Infinidat solutions reduced the full backup time for one of their databases to ONLY 30 minutes from 5 hours with their former products – a 10x improvement.
- Infinidat reduced the backup time for another workload to ONLY 4.75 hours from 18 hours with the other vendors' products – nearly a 4x improvement.
- InfiniGuard and InfiniBox have enabled a reduction in recovery time of 97% for full copies. Additionally, granular recovery options are always available.
- For the VTL backup of AIX systems, the customer saw data reduction of a staggering 20-to-1 ratio.
- InfiniGuard has reduced full physical backup time by 95%. The integrity of the backup is then fully verified and, after verification, converted to an immutable copy to protect against cyberattacks.

## Multiple Use Cases: Yes, We Can Do That!

InfiniBox, a hybrid storage system with performance exceeding most competitive all-flash systems, is an obvious choice for organizations that want to leverage native application utilities to optimize the backup process and backup speed with recovery being of the utmost importance. InfiniBox is built for performance at scale, with 6.9PB of usable capacity and up to 17.2PB of effective capacity.



Another InfiniBox hybrid use case is when an organization is not interested in a purpose-built backup solution and prefers to use backup applications and leverage deduplication at the backup server. Many workloads encrypt their data locally. In this case, the data can't be deduplicated and, therefore, can't take advantage of what InfiniGuard offers. And again, InfiniBox excels here too. Customers benefit from our performance and scale, ease of use, enterprise data services, and availability. It is a no-compromise solution.

Our next use case is more traditional, where any major backup application is used, and there is a need to store that backup data on a highly efficient, purpose-built, modern backup solution that ensures performance. InfiniGuard, which incorporates an integrated InfiniBox, delivers backup and restore performance. InfiniGuard delivers measured ingest rates of up to 180TB per hour with our NetBoost technology. Many purpose-built backup appliances (PBBA) are built specifically for ingest rates and not recovery rates. They build a specific storage operating system, resulting in insufficient recovery rates. InfiniGuard easily overcomes that problem because of the integrated InfiniBox, a primary storage solution built for performance at scale with unmatched availability and built-in InfiniSafe cyber resilience.

Let's not forget the cloud. Infinidat also provides InfuzeOS Cloud Edition, which has all the same functional elements as our on-premises offerings and can be used, as needed, to store data in the cloud or multi-cloud (AWS and Azure) as part of a company's data protection strategy.

### Key features of Infinidat InfiniBox include:

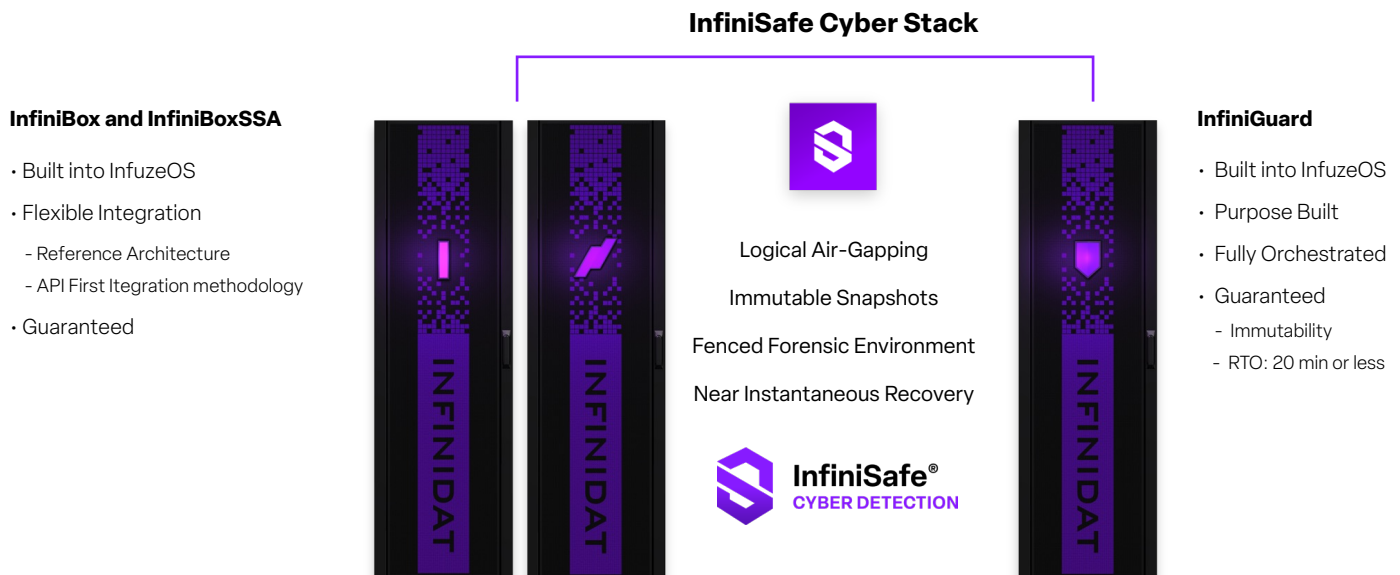
1. Groundbreaking, real-world application/backup performance is powered by InfuzeOS and its software-defined storage architecture, innovations such as neural cache and InfiniRAID®, which drive advanced data placement and access, accelerating performance.
2. Enterprise data services with some of the best replication technology available, including full array active/active, synchronous replication, and asynchronous replication with intervals as low as 4 seconds.
3. SLA-based guarantees increase our business value. We provide guarantees for 100% availability, performance, and cyber storage immutability and recoverability time objectives to align with enterprise IT and business priorities.<sup>2</sup>
4. Datacenter and OpEx efficiencies: Our storage density and power efficiency reduce floor/rack space, power, and cooling to improve OpEx and create a greener data center. An IDC study reports an ROI for our solution in as little as 11 months, improving time to value.<sup>3</sup> InfiniOps, our AIOps in the box and outside the box, provides the flexibility to integrate our storage solutions into your ecosystem and enables ease of use and automation that significantly reduces the time spent managing your storage infrastructure.

**“Switching to InfiniGuard has been a huge win for us.”**

— Lead Enterprise Architect Technology Service Provider Serving the Healthcare Vertical

### We have your back with the InfiniSafe Cyber Stack

The InfuzeOS software-defined storage (SDS) platform provides advanced cyber storage capabilities to deliver cyber resilience services. We use a secure-by-design approach with our InfiniSafe core cyber stack and optional InfiniSafe Cyber Detection capabilities to scan data for ransomware.



## Core InfiniSafe Capabilities:

- Logical air-gapped protection: Leveraging our ability to isolate the data sets logically, fully, and completely within our solution without requiring secondary environments.
- Immutable snapshots: Completely hardened and unchangeable data set protection. These policies are hardened and consistent, helping ensure your business is following a proper set of best practices.
- Fenced forensic network: Dedicated networking resources are activated only to surface a copy of the data you need to inspect, test, or recover from. This is a fully isolated network environment from your production network and is tightly managed and orchestrated.
- Near-instantaneous recovery of any size backup repository: Pick the recovery point you need, regardless of size, even petabytes, and in just a few clicks and within minutes, be ready to analyze or present your datasets for restoration to your backup environment.

**“Cost-competitive and well-supported data protection platform.”**

— Telecommunications Industry

## Optional InfiniSafe Cyber Detection

To extend cyber prevention further, we offer InfiniSafe Cyber Detection, an optional add-on that validates the integrity of your immutable snapshots using powerful, AI-based scanning engines. Comprehensive machine learning detects ransomware and malware attacks with up to 99.99% accuracy so you can quickly and easily identify your data's last known good copy for rapid, intelligent recovery.

InfiniSafe Cyber Detection gives you leverage back when you know your data is not compromised.

## Conclusion

Infinidat enterprise storage platforms, InfiniBox and InfiniGuard, offer outstanding performance levels, availability, cyber resilience, ease of use, and cost savings at scale for any backup/recovery data protection use case. By their very nature, backups are the last resort for protecting and recovering critical data. The storage location for this critical data should embody enterprise-caliber reliability and resilience. Infinidat SLA-based guarantees for performance, 100% availability, and cyber storage recoverability set the standard for enterprise storage and backup use cases, ensuring the utmost safety and recoverability for critical backed-up data. Infinidat allows customers to choose the solution that best fits their use case/environment with a consistent and easy-to-manage set of solutions that will save them time and money.

<sup>1</sup>We guarantee the recoverability of an immutable snapshot and complete the snapshot recovery within 1 minute for InfiniBox and within 20 minutes for InfiniGuard - Terms and conditions apply

<sup>2</sup>100% Availability is based on our 100% data availability guarantee, performance guarantees require a detailed performance analysis of workloads for a guaranteed SLA - Terms and conditions apply

<sup>3</sup>IDC White Paper, Sponsored by Infinidat, The Business Value of Infinidat Storage, Doc. #US49976922, February 2023